



United States  
Environmental Protection  
Agency

Office of Solid Waste and  
Emergency Response  
Washington, DC 20460

EPA/540/R95/128  
May 1996

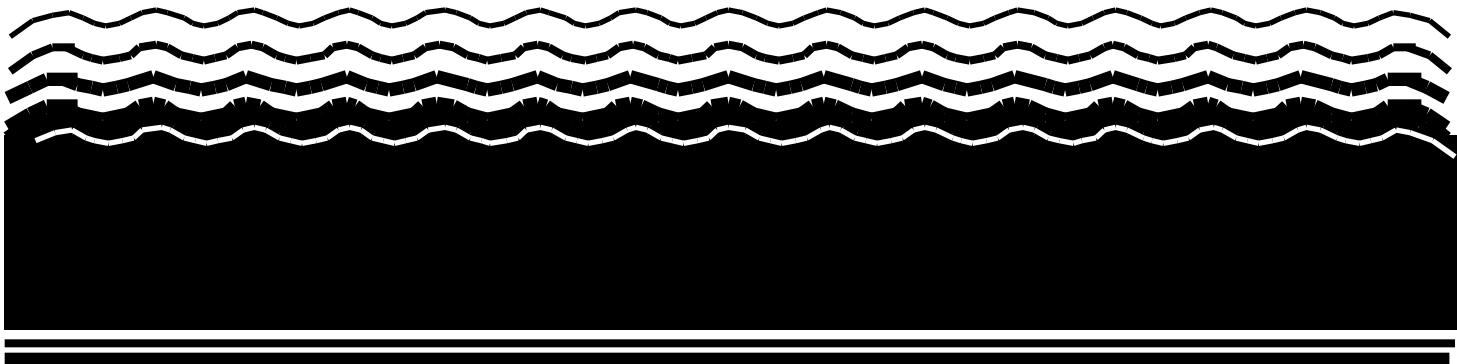
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# **Soil Screening Guidance: Technical Background Document**

*Second Edition*



Publication 9355.4-17A  
May 1996

# **Soil Screening Guidance: Technical Background Document**

***Second Edition***

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U.S. Environmental Protection Agency  
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## **DISCLAIMER**

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Notice: The Soil Screening Guidance is based on policies set out in the Preamble to the Final Rule of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which was published on March 8, 1990 (55 *Federal Register* 8666).

This guidance document sets forth recommended approaches based on EPA's best thinking to date with respect to soil screening. Alternative approaches for screening may be found to be more appropriate at specific sites (e.g., where site circumstances do not match the underlying assumptions, conditions, and models of the guidance). The decision whether to use an alternative approach and a description of any such approach should be placed in the Administrative Record for the site.

The policies set out in both the Soil Screening Guidance: User's Guide and the supporting Soil Screening Guidance: Technical Background Document are intended solely as guidance to the U.S. Environmental Protection Agency (EPA) personnel; they are not final EPA actions and do not constitute rulemaking. These policies are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States government. EPA officials may decide to follow the guidance provided in this document, or to act at variance with the guidance, based on an analysis of specific site circumstances. EPA also reserves the right to change the guidance at any time without public notice.

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## PREFACE

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This document provides the technical background for the development of methodologies described in the *Soil Screening Guidance: User's Guide* (EPA/540/R-96/018), along with additional information useful for soil screening. Together, these documents define the framework and methodology for developing Soil Screening Levels (SSLs) for chemicals commonly found at Superfund sites. This document is an updated version of the background document developed in support of the December 30, 1994, draft Soil Screening Guidance. The methodologies described in this document and the guidance have been revised in response to public comment and extensive peer review. The revisions, along with other technical analyses conducted to address the comments, are described herein.

This background document is presented in five parts. Part 1 describes the soil screening process and its application and implementation at Superfund sites. Part 2 describes the methodology used to develop SSLs, including the assumptions and theories used. Part 3 provides information on more detailed models that may be used to develop site-specific SSLs. Part 4 addresses sampling schemes for measuring soil contaminant levels during the soil screening process. Part 5 provides technical background on the determination of chemical-specific properties for calculating SSLs.

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## **ACKNOWLEDGMENTS**

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This technical background document was prepared by Research Triangle Institute (RTI) under EPA Contract 68-W1-0021, Work Assignment D2-24, for the Office of Emergency and Remedial Response (OERR), U.S. Environmental Protection Agency (EPA). Janine Dinan and Loren Henning of EPA, the EPA Work Assignment Managers for this effort, guided the effort and are also principal EPA authors of the document along with Sherri Clark of EPA. Robert Truesdale is the RTI Work Assignment Leader and principal RTI author of the document. Craig Mann of Environmental Quality Management, Inc. (EQ), conducted the modeling effort for the inhalation pathway and provided background information on that effort. Dr. Zubair Saleem of EPA's Office of Solid Waste conducted the EPACMTP modeling effort and provided the discussion on the use of this model for generic DAF development. The authors would like to thank all EPA, State, public, and peer reviewers whose careful review and thoughtful comments greatly contributed to the quality of this document. Technical support for the final document production was provided by Dr. Smita Siddhanti of Booz•Allen & Hamilton.